



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,585	01/08/2002	Olfa Chetay	Q67992	1441
7590	10/28/2005		EXAMINER	
SUGHRUE MION, PLLC 2100 Pennsylvania Avenue, NW Washington, DC 20037-3213				LAU, TUNG S
		ART UNIT	PAPER NUMBER	2863

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/038,585	CHETAY ET AL.
	Examiner Tung S. Lau	Art Unit 2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10/19/2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 15-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 15-32 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date See Office Action.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/06/2005 has been entered.

Election/Restrictions

2. A response on 09/21/2005 a provisional election was made **without traverse** to prosecute the invention of claims 15-32. Claims 20, 21 and 22 been amended.

Priority

3. Receipt is acknowledged of paper submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file. Reminds to the applicants that perfecting a claim to priority under 35 U.S.C. 119(a)-(d) within the time period set in 37 CFR 1.55(a)(1) or filing a grantable petition under 37 CFR 1.55(c). See MPEP § 201.13. The foreign priority filing date must antedate the reference and be perfected. The filing date of the priority document is not perfected unless applicant has filed a certified priority document in the application (and an English language translation, if the document is not in English) (see 37 CFR 1.55(a)(3)) and the examiner has established that the priority document satisfies the

enablement and description requirements of 35 U.S.C. 112, first paragraph. (See MPEP 706.02(b) section (e).

Information Disclosure Statement

4. Information Disclosure Statement filed on 09/06/2005 is acknowledged by the examiner; A copy of a signed PTO-1449 attached with this office action.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Delatorre (U.S. Patent 4,924,701).

Regarding claim 15:

Delatorre discloses a method of monitoring the proportion of a component in a gaseous mixture, said gaseous mixture having at least two components and being contained in an electrical switchgear enclosure (Col. 1-2, Lines 44-40, fig. 13, 14), said method comprising the steps of: a) measuring the pressure, the temperature, and the density of the gas mixture contained in the electrical switchgear enclosure by means of sensors mounted on said enclosure (Col. 3-4, Lines 45-24, fig. 13, 14), b) determining said proportion by processing the measured values of pressure, temperature and density in a data-processing unit (Col. 1-2, Lines 44-40, Col. 3-4, Lines 45-24, fig. 13, 14) wherein step a) is

carried out without tapping said gas mixture (Col. 1-2, Lines 44-40, Col. 3-4, Lines 45-24).

Regarding claim 28:

Delatorre discloses electrical switchgear provided with an enclosure containing a gaseous mixture of at least two dielectric gases under pressure, wherein the proportion of one of these dielectric gases in the mixture (Col. 1-2, Lines 44-40, fig. 13, 14) is determined by implementing a method comprising the steps of: a) measuring the pressure, the temperature, and the density of the gas mixture contained in the electrical switchgear enclosure by means of sensors mounted on said enclosure (Col. 3-4, Lines 45-24, fig. 13, 14), b) determining said proportion by processing the measured values of pressure, temperature and density in a data-processing unit (Col. 1-2, Lines 44-40, Col. 3-4, Lines 45-24, fig. 13, 14), wherein step a) is carried out without tapping said gas mixture (Col. 1-2, Lines 44-40, Col. 3-4, Lines 45-24), and wherein the gas mixture is made up of two components constituted by N₂ and SF₆ (Col. 8, Lines 9-19).

Regarding claim 29:

Delatorre discloses a method of monitoring the proportion of a component in a gaseous mixture, said gaseous mixture having at least two components and being contained in an electrical switchgear enclosure (Col. 1-2, Lines 44-40, fig. 13, 14), said method comprising the steps of: a) measuring the pressure, the temperature, and the density of the gas mixture contained in the electrical switchgear enclosure by means of sensors mounted on said enclosure (Col. 3-4,

Lines 45-24, fig. 13, 14); b) determining said proportion by processing the measured values of pressure, temperature and density in a data-processing unit (Col. 3-4, Lines 45-24, fig. 13, 14), and c) running algorithms in the data-processing unit for correcting errors and drift specific to said sensors (Col. 3-4, Lines 45-24, fig. 13, 14, Col. 13, Lines 30-64), wherein step a) is carried out without tapping said gas mixture (Col. 1-2, Lines 44-40, Col. 3-4, Lines 45-24).

Regarding claim 30:

Delatorre discloses a system for monitoring the proportion of a component in a gaseous mixture, said gaseous mixture having at least two components and being contained in an electrical switchgear enclosure (Col. 1-2, Lines 44-40, fig. 13, 14), said system comprising: at least one sensor mounted on said enclosure for measuring the pressure (Col. 3-4, Lines 45-24, fig. 13, 14), the temperature, and the density of the gas mixture contained in the electrical switchgear enclosure (Col. 3-4, Lines 45-24, fig. 13, 14), said sensor measuring without tapping the said gas mixture (Col. 1-2, Lines 44-40, Col. 3-4, Lines 45-24), and a data processing unit for processing the measured values of pressure, temperature and density (Col. 3-4, Lines 45-24, fig. 13, 14).

Regarding claim 31:

Delatorre discloses a system for monitoring the proportion of a component in a gaseous mixture, said gaseous mixture having at least two components and being contained in an electrical switchgear enclosure (Col. 1-2, Lines 44-40, fig. 13, 14), said system comprising: first means mounted on said enclosure for

measuring the pressure , the temperature, and the density of the gas mixture contained in the electrical switchgear enclosure (Col. 1-2, Lines 44-40, Col. 3-4, Lines 45-24, fig. 13, 14), said first means measuring without tapping said gas mixture (Col. 1-2, Lines 44-40, Col. 3-4, Lines 45-24), and second means for processing the measured values of pressure, temperature and density (Col. 1-2, Lines 44-40, Col. 3-4, Lines 45-24, Col. 13, Lines 30-64).

Regarding claims 16, 26, Delatorre further discloses a high voltage switchgear (Col. 18, Lines 1-23); Regarding claims 17, 27, Delatorre further discloses a gastight enclosure (fig. 3, unit 107); Regarding claim 18, Delatorre further discloses a programmed to solve thermodynamic state equation of components (Col. 4-5, Lines 25-65); Regarding claim 19, Delatorre further discloses data processing store data table in a memory, said data table containing a plurality of data items representative of various proportions of said component in correspondence with data items representative of various measurements of the pressure, of the temperature, and of the density of the gas mixture containing said component (fig. 13, unit 166, 165, 167, Col. 4-7, Lines 66-7); Regarding claim 20, Delatorre further discloses vibrating blade sensor (Col. 16, Lines 24-34); Regarding claim 21, Delatorre further discloses the density is measured by capacitor whose capacitance is a function of the permittivity of the gas mixture (Col. 3-4, Lines 45-24); Regarding claim 22, Delatorre further discloses is measured by an interferometer (Col. 3-4, Lines 45-24, fig. 1b); Regarding claim

23, Delatorre further discloses a micro computer (Col. 4-7, Lines 47-6, fig. 13, unit 166, 165); Regarding claim 24, Delatorre further discloses a micro computer a microncontroller (fig. 13, unit 165); Regarding claim 25, Delatorre further discloses at least two gases (Col. 7, Lines 9-39); Regarding claim 32, Delatorre further discloses mixture acts as an insulation in the electrical switchgear (Col. 5-6, Lines 3-65).

Response to Arguments

6. Applicant's arguments with respect to the new claims have been considered but are moot in view of the new ground(s) of rejection. However, applicant's arguments filed 09/06/2005 have been fully considered but they are not persuasive.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 571-272-2274. The examiner can normally be reached on M-F 9-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TL

MICHAEL NGHIEM
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read "Michael Nghiem".